

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of)
)
Kihara Yukihiro et al)
)
Appln. No. : TBA)
)
Filed : July 27, 2001)
)
For : WIPING CLOTH MADE OF NONWOVEN)
FABRIC AND METHOD FOR)
MANUFACTURING WIPING CLOTH)
MADE OF NONWOVEN FABRIC)

PRELIMINARY AMENDMENT

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

Prior to an examination on the merits, please amend this application as follows:

AMENDMENTS

IN THE CLAIMS:

Please amend claims 3, 4, 5, 6, 9, 10, 11, 12 and 13 as follows:

3. (Amended) The wiping cloth made of nonwoven fabric according to claim 1, wherein a component containing 1.5 to 15 mass percent polyoxyalkyleneglycol of 2000 to 20000 in mass average molecular weight is used as the polyester polymer component A.

4. (Amended) The wiping cloth made of nonwoven fabric according to claim 2, wherein the fibers A and the fibers B are not substantially entangled three-dimensionally with each other.

5. (Amended) The wiping cloth made of nonwoven fabric according to claim 1, wherein the fibers A and the fibers B are substantially entangled three-dimensionally with each other.

6. The wiping cloth made of nonwoven fabric according to claim 1, wherein the fibers A and the fibers B are continuous fibers.

9. The method for manufacturing a wiping cloth made of nonwoven fabric according to claim 7, wherein a component containing 1.5 to 15 mass percent polyoxyalkyleneglycol of 2000 to 20000 in mass average molecular weight is used as the polyester polymer component A.

10. The method for manufacturing a wiping cloth made of nonwoven fabric according to claim 8, wherein the splitting is carried out by buckling treatment.

11. The method for manufacturing a wiping cloth made of nonwoven fabric according to claim 7, wherein water needling or needle punching carries out the splitting.

12. The method for manufacturing a wiping cloth made of nonwoven fabric according to claim 7, wherein the splittable conjugate fibers are splittable conjugate continuous fibers.

13. The method for manufacturing a wiping cloth made of nonwoven fabric according to claim 7, wherein low-temperature plasma treatment is applied using argon as the inert gas.

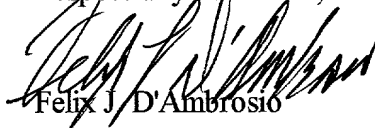
--Abstract of the Disclosure

A wiping cloth which is made of a nonwoven fabric and which has satisfactory water absorption and changes little in water absorption with time. It is obtained from a specific composite fiber capable of being split. This composite fiber is composed of a polyester polymer component (A) containing a polyoxyalkylene glycol having a weight-average molecular weight of 2,000 to 20,000 and, bonded thereto, a polyolefin polymer component (B) incompatible with the polymer component (A). This composite fiber is split into one or more fibers (A) consisting of the polymer component (A) and one or more fibers (B) consisting of the polymer component (B). The exposed surfaces of the fibers (A) and (B) resulting from the splitting are treated with a plasma. Due to the synergistic effect of the polyoxyalkylene glycol and the plasma treatment of the exposed surfaces of the fibers (A) and (B), water absorption is significantly improved.--

REMARKS

The above amendments to the claims are presented to avoid the multiple dependent claim fee.

Respectfully submitted, -


Felix J. D'Ambrosio
Reg. No. 25,721

July 27, 2001

JONES, TULLAR & COOPER, P.C.
P.O. Box 2266 Eads Station
Arlington, Virginia 22202
(703) 415-1500

MARKED-UP COPY OF CLAIMS 3, 4, 5, 6, 9, 10, 11, 12 AND 13

3. (Amended) The wiping cloth made of nonwoven fabric according to claim 1 [or claim 2], wherein a component containing 1.5 to 15 mass percent polyoxyalkyleneglycol of 2000 to 20000 in mass average molecular weight is used as the polyester polymer component A.

4. (Amended) The wiping cloth made of nonwoven fabric according to claim 2 [or claim 3], wherein the fibers A and the fibers B are not substantially entangled three-dimensionally with each other.

5. (Amended) The wiping cloth made of nonwoven fabric according to [any one of claims 1 to 3] claim 1, wherein the fibers A and the fibers B are substantially entangled three-dimensionally with each other.

6. The wiping cloth made of nonwoven fabric according to [any of claims 1 to 5] claim 1, wherein the fibers A and the fibers B are continuous fibers.

9. The method for manufacturing a wiping cloth made of nonwoven fabric according to claim 7 [or 8], wherein a component containing 1.5 to 15 mass percent polyoxyalkyleneglycol of 2000 to 20000 in mass average molecular weight is used as the polyester polymer component A.

10. The method for manufacturing a wiping cloth made of nonwoven fabric according to claim 8 [or 9], wherein the splitting is carried out by buckling treatment.

11. The method for manufacturing a wiping cloth made of nonwoven fabric according to [any of claims 7 to 9] claim 7, wherein water needling or needle punching carries out the splitting.

12. The method for manufacturing a wiping cloth made of nonwoven fabric according to [any of claims 7 to 11] claim 7, wherein the splittable conjugate fibers are splittable conjugate continuous fibers.

13. The method for manufacturing a wiping cloth made of nonwoven fabric according to [any of claims 7 to 12] claim 7, wherein low-temperature plasma treatment is applied using argon as the inert gas.